MULTIMEDIA UNIVERSITY®

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2022/2023

DEC5614 – INTRODUCTORY MICROECONOMICS

(All sections/Groups)

5 JULY 2023
2.30 p.m – 4.30 p.m
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 5 pages.
2. Attempt **ALL** questions. The distribution of the marks for each question is given.
3. Please write all your answers in the Answer Booklet provided.

QUESTION 1

Consumption Possibilities	Cherry	Kiwi
A	14	0
B	12	3
C	10	6
D	8	9
E	6	12
F	0	21

Table 1

Fruit is one of Olivia's favourite foods. However, cherry and kiwi are the only two kinds of fruit that she consumes. Olivia allocate RM63 per month to spend on the fruits that are her favourites. The price of one kilogram of cherry is RM4.50, whereas the price of one kilogram of kiwi is RM3.

(a) Based on the information above, graph this budget line where Cherry is measured on y-axis and Kiwi is measured on the x-axis. (8 marks)

(b) Determine the budget equation for the fruit's consumption. (2 marks)

(c) Given this additional information, complete Table 2 below and identify the fruit's utility maximizing choice at this budget constrain. (11 marks)
(You are required to draw and complete the table below in your answer booklet)

Consumption Possibilities	Cherry (RM4.50)				Kiwi (RM3)			
	Quantity (per month)	Total Utility	MU	MU/P	MU/P	MU	Total Utility	Quantity (per month)
A	14	223			-	-	0	0
B	12	197					75	3
C	10	159					123	6
D	8	114					159	9
E	6	60					183	12
F	0	0	-	-			205	21

Table 2

(d) Define the marginal rate of substitution (MRS). Determine the MRS if Olivia is willingly to give up 14 of Cherry in a month to get 21 Kiwi. (4 marks)

(Total: 25 marks)

Continued ...

QUESTION 2

Ms. Iylia is a new entrepreneur in the business world. She is having difficulties understanding ideas that define the relationship between production and labor employed. Table 3 below shows the labor productivity of her Ayam Percik Jawa producing enterprise. Assume that the firm is experiencing a short-run technological constraint.

(a) Calculate Ms. Iylia's average product and marginal product at every level of production. (9 marks)
(You are required to draw and complete the table below in your answer booklet)

	Quantity of Labor	Total Ayam Percik Jawa	Average Product (AP)	Marginal Product (MP)
A	1	40		
B	2	100		
C	3	130		
D	4	150		
E	5	160		

Table 3

(b) Based on the calculation above, graph this average product and marginal product where average product and marginal product are measured on y-axis and labor is measured on the x-axis. (15 marks)

(c) On the graph that you drew above, label the maximum average product point. (1 mark)

(Total: 25 marks)

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QUESTION 3

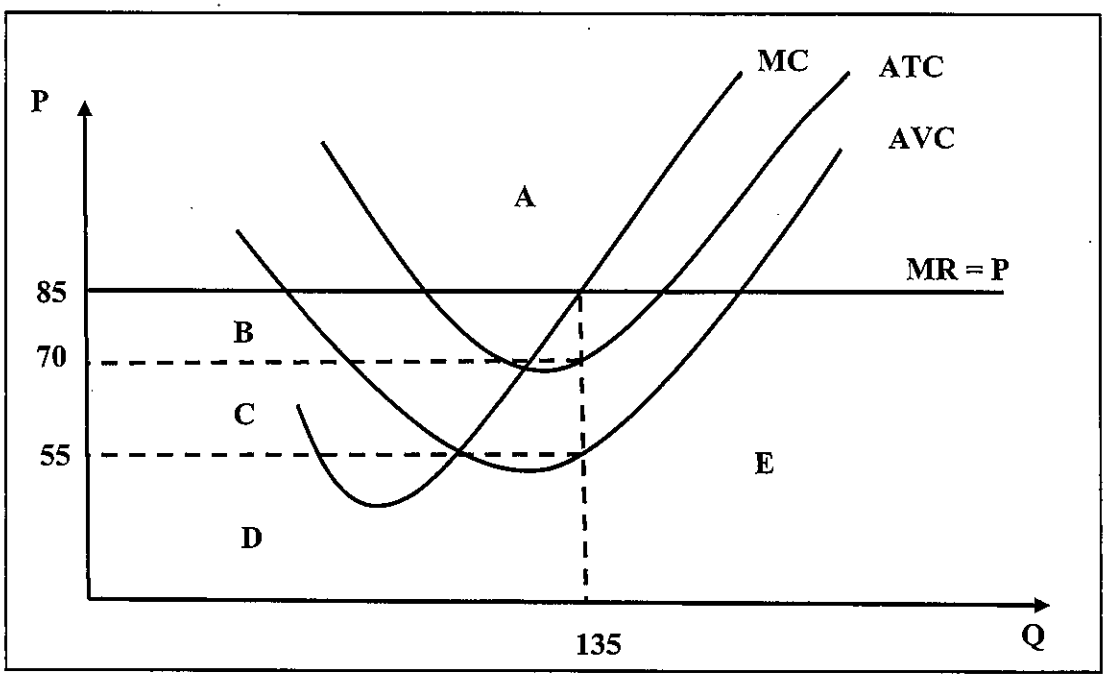


Figure 1

Based on Figure 1 above, calculate:

(a) Total revenue. (3 marks)

(b) Total cost. (3 marks)

(c) Total variable cost. (3 marks)

(d) Total fixed cost. (3 marks)

(e) Total profit. (3 marks)

(f) If demand increases and the new market equilibrium price rises to RM100, determine the firm's new total revenue and profit. Assume that the firm is selling at the same quantity. (6 marks)

(g) State the profit area based on diagram above. (2 marks)

(h) What is the type of market structure for this firm? Justify your answer. (2 marks)

(Total: 25 marks)

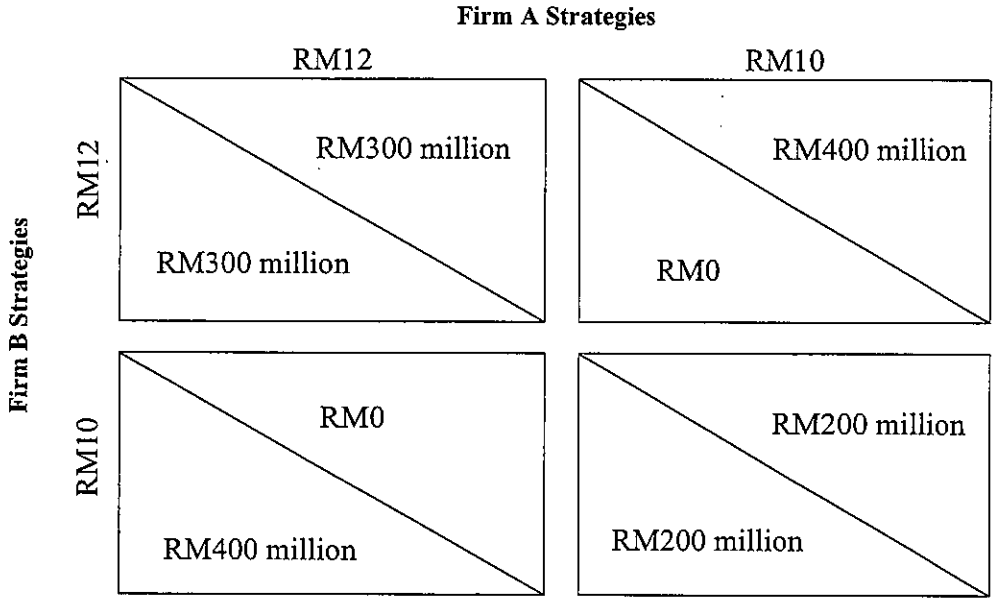
Continued ...

QUESTION 4

(a) List any **ONE (1)** characteristic of monopolistic market structure. (1 mark)

(b) Explain **TWO (2)** key differences between monopolistic competition and perfect competition. (4 marks)

(c) Two firms supplying breakfast cereals agreed to manipulate the market price. They plan to decide whether to charge RM10 or RM12 so that they could get as high profit as possible. Figure 2 below shows the payoff matrix of both firms.



(i) What is the possibility if both firms charge RM12? (2 marks)

(ii) What is the possibility if both firms charge RM10? (2 marks)

(iii) What is the possibility if firm A charge RM12 but firm B charge RM10? (2 marks)

(iv) What is the possibility if firm B charge RM12 but firm A charge RM10? (2 marks)

(v) Determine the Nash equilibrium between Firm A and Firm B. (2 marks)

(Total: 15 marks)

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QUESTION 5

Quantity of labor	Output of coffee per week	Marginal product of labor	Value of marginal product
1	0	-	-
2	70		
3	130		
4	180		
5	220		
6	250		

Table 4

Complete the table above by calculating the marginal product of labor and the value of marginal product. Assume the coffee price is RM8 per cup. (10 marks)
(You are required to draw and complete the table below in your answer booklet)

(Total: 10 marks)

End of Paper